

CLAIMS

What is claimed is:

- 1 1. A method for sending packets in a computer system comprising the computer-
2 implemented steps of:
3 communicating from a user level to an operating system level a policy for
4 manipulating packets; and
5 at the operating system level, modifying the packets based on the policy.
- 1 2. The method of Claim 1 wherein the operating system level is below the
2 IP stack.
- 1 3. The method of Claim 1 wherein the policy indicates destinations to
2 which messages should be redirected.
- 1 4. The method of Claim 1 wherein:
2 the step of modifying the packets includes receiving a packet, replicating the packet
3 based on the policy to create a plurality of replicated packets for a plurality of
4 users interested in receiving the packet; and
5 the method further comprises the step of transmitting the replicated packets to the
6 interested users based on the policy.
- 1 5. A method for sending packets in a computer system comprising the computer-
2 implemented steps of:

50269-0517 (P-00043-PAT-N)

3 communicating from a user level to hardware a policy for manipulating
4 packets; and
5 in the hardware, modifying the packets based on the policy.

1 6. The method of Claim 5 wherein the hardware is a router.

1 7. A method for sending messages comprising the computer-implemented steps of:
2 creating an aggregate message from individual messages that are to be sent
3 using an operating system service;
4 transmitting the aggregate message to an operating system level with a system
5 call;
6 within the operating system level, dividing the aggregate message back into
7 individual messages; and
8 transmitting the individual messages using the operating system service.

1 8. The method of Claim 7 wherein the individual messages are packets.

1 9. The method of Claim 7 wherein the aggregate message includes a policy.

1 10. The method of Claim 9 wherein the policy indicates destinations to which messages
2 should be redirected.

1 11. The method of Claim 9 wherein the policy includes video-to-message information.

50269-0517 (P-00043-PAT-N)

- 1 12. The method of Claim 9 wherein the policy includes a time stamp that is a range of
2 time indicating when the individual messages should be transmitted.
- 1 13. The method of Claim 9 wherein the policy includes time stamps for transmitting the
2 individual messages according to the time stamps associated with the individual
3 messages.
- 1 14. The method of Claim 13 wherein the time stamps are sequence numbers.
- 1 15. The method of Claim 13 wherein the time stamps are relative virtual time delays with
2 respect to the first message to be transmitted.
- 1 16. A computer-readable medium for sending packets in a computer system, the
2 computer-readable medium bearing instructions for performing the steps of:
3 communicating from a user level to an operating system level a policy for
4 manipulating packets; and
5 at the operating system level, modifying the packets based on the policy.
- 1 17. The computer-readable medium of Claim 16 wherein the operating
2 system level is below the IP stack.
- 1 18. The computer-readable medium of Claim 16 wherein the policy
2 indicates destinations to which certain messages should be redirected.

1 19. The computer-readable medium of Claim 16 wherein:

2 the step of modifying the packets includes receiving a packet, replicating the packet
3 based on the policy to create a plurality of replicated packets for a plurality of
4 users interested in receiving the packet; and
5 the method further comprises the step of transmitting the replicated packets to the
6 interested users based on the policy.

1 20. A computer-readable medium for sending packets in a computer system, the
2 computer-readable medium bearing instructions for performing the steps of:

3 communicating from a user level to hardware a policy for manipulating
4 packets; and
5 in the hardware, modifying the packets based on the policy.

1 21. The computer-readable medium of Claim 20 wherein the hardware is a router.

1 22. A computer-readable medium for sending messages in a computer system, the
2 computer-readable medium bearing instructions for performing the steps of:

3 creating an aggregate message from individual messages that are to be sent
4 using an operating system service;
5 transmitting the aggregate message to an operating system level with a system
6 call;
7 within the operating system level, dividing the aggregate message back into
8 individual messages; and
9 transmitting the individual messages using the operating system service.

50269-0517 (P-00043-PAT-N)

1 23. The computer-readable medium of Claim 22 wherein the individual messages are
2 packets.

1 24. The computer-readable medium of Claim 22 wherein the aggregate message includes
2 a policy.

1 25. The computer-readable medium of Claim 23 wherein the policy indicates destinations
2 to which messages should be redirected.

1 26. The computer-readable medium of Claim 24 wherein the policy includes video-to-
2 message information.

1 27. The computer-readable medium of Claim 24 wherein the policy includes a time stamp
2 that is a range of time indicating when the individual messages should be transmitted.

1 28. The computer-readable medium of Claim 24 wherein the policy includes time stamps
2 for transmitting the individual messages according to the time stamps associated with
3 the individual messages.

1 29. The computer-readable medium of Claim 28 wherein the time stamps are sequence
2 numbers.

- 1 30. The computer-readable medium of Claim 28 wherein the time stamps are relative
- 2 virtual time delays with respect to the first message to be transmitted.

50269-0517 (P-00043-PAT-N)